IN THE CLAIMS

The present listing of claims replaces all previous listings of claims.

1. (Original) A method of production of carbon nanoparticles, comprising the steps of:

providing on substrate particles a transition metal compound which is decomposable to yield the transition metal under conditions permitting carbon nanoparticle formation;
contacting a gaseous carbon source with the substrate particles;

before, during or after said contacting step, decomposing the transition metal compound to yield the transition metal on the substrate particles;

forming carbon nanoparticles by decomposition of the carbon source catalysed by the transition metal; and

collecting the carbon nanoparticles formed.

2. (Original) A method as claimed in Claim 1, wherein the transition metal compound is a transition metal salt.

3. (Original) A method as claimed in Claim 2, wherein the transition metal salt is a transition metal formate or oxalate.

4. (Currently Amended) A method as claimed in Claim 1 ~~or Claim 2~~, wherein the transition metal compound is a transition metal carbonyl.

5. (Original) A method as claimed in Claim 4, wherein the transition metal compound is a multi metal atom transition metal carbonyl.

6. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, wherein the transition metal is nickel, iron or cobalt.

7. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, wherein the gaseous carbon source is a hydrocarbon or carbon monoxide.

8. (Original) A method as claimed in Claim 7, wherein the gaseous carbon source is methane or acetylene.

9. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, wherein the gaseous carbon source is passed over the substrate particles.

10. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, wherein the gaseous carbon source is mixed with a diluent.

11. (Original) A method as claimed in Claim 10, wherein the diluent is argon.

12. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, wherein the substrate particles comprise oxide particles and/or silicate particles.

13. (Original) A method as claimed in Claim 12, wherein the substrate particles comprise one or more of silica, alumina, $CaSiO_x$, calcium oxide or magnesium oxide.

14. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, wherein the substrate particles are in the form of a fumed powder, a colloid, a gel or an aerogel.

15. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, wherein the transition metal compound is decomposed by heating.

16. (Original) A method as claimed in Claim 15, wherein the transition metal compound is decomposed by heating to a temperature between 200 °C and 1000°C.

17. (Original) A method as claimed in Claim 16, wherein the transition metal compound is decomposed by heating to a temperature between 600 °C and 1000 °C.

18. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, wherein the carbon nanoparticles are carbon nanotubes.

19. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, wherein the carbon nanotubes are single walled carbon nanotubes.

20. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, further comprising the initial step of impregnating the substrate particles with the transition metal compound.

21. (Currently Amended) A method as claimed in ~~any one of the preceding claims,~~ Claim 1, where the method is continuous.

22. (Original) A method as claimed in Claim 21, comprising the steps of:
continuously providing substrate particles;
fluidising the substrate particles with a flow of gaseous carbon source;
heating the transition metal compound on the substrate particles; and
collecting the carbon nanoparticles formed by elution.

23. (Original) A method as claimed in Claim 21, comprising the steps of:
continuously providing substrate particles to an upper part of an inclined surface;
contacting the substrate particles on the inclined surface with a flow of gaseous carbon source;
heating the transition metal compound on the substrate particles; and
collecting carbon nanoparticles formed from a lower part of the inclined surface.

24. (Original) A method of production of carbon nanoparticles, comprising the steps of:
providing on substrate particles a transition metal oxalate, formate or multi metal atom carbonyl;
heating the transition metal oxalate, formate or multi metal atom carbonyl on the substrate particles;
contacting a gaseous carbon source with the substrate particles; and collecting the carbon nanoparticles formed.

25. (Original) A method as claimed in Claim 24, wherein the transition metal oxalate, formate or multi metal atom carbonyl is nickel formate and the substrate particles are silica particles.

26. (Currently Amended) Carbon nanoparticles formed by a method as claimed in ~~any one of the preceding claims.~~ Claim 1.